Discovery of Anambra Waxbill Estrilda poliopareia in south-eastern Benin

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Découverte de l'Astrild du Niger *Estrilda poliopareia* dans le sud-est du Bénin. L'Astrild du Niger *Estrilda poliopareia* n'était jusqu'ici connu que du delta du Niger et d'une donnée isolée à l'ouest de Lagos, au Nigéria. La découverte de l'espèce dans plusieurs localités de la Basse Vallée de l'Ouémé, sud-est du Bénin, à quelques dizaines de kilomètres seulement de Cotonou, dans un habitat relativement répandu au sud du Bénin et similaire à ce que l'espèce fréquente dans le sud du Nigéria, laisse supposer qu'il s'agit d'une population distincte et viable. Cette découverte, éloignée de l'aire principale de répartition précédemment connue, vient profondément modifier les connaissances sur l'espèce. De plus amples investigations seront nécessaires pour évaluer l'effectif de cette population, ainsi que son niveau de conservation.

Prior to the observations reported here, Anambra Waxbill Estrilda poliopareia was known only from a few localities in southern Nigeria, from the Lower Niger to the extreme south-west of the country, and from a single record at Badagri (c.06°25'N 02°53'E) in westcoastal Nigeria c.20 km from the Benin border (Elgood et al. 1994). There are few documented sightings and the species, with a world population estimated at just 250-1,000 individuals, is classified as Vulnerable (Serle 1957: 681; BirdLife International 2008). Although reportedly common at one locality (Onitsha) in the Niger Delta in 1954, there have been only a few records since 1980, despite considerable field work effort (Roux & Otobotekere 2005, BirdLife International 2011). The known population thus appears to be very small, despite the existence of large areas of apparently suitable habitat. However, BirdLife International questions if this apparent rarity is genuine or is simply the result of lack of knowledge. The discovery of the species in 2010 in south-eastern Benin, in habitats similar to those where the species is present in southern Nigeria, thus represents a significant finding and perhaps the first step towards answering the distribution question.

Observations

On 8 August 2010, WP observed two unfamiliarlooking waxbills in a marshland near Sèdjè-Dénou, *c*.35 km north of Cotonou in the Basse Vallée de l'Ouémé (06°43'30"N 02°23'15"E). The birds had a similar structure but different plumage coloration compared to the common Orangecheeked Waxbill *Estrilda melpoda*, being overall buffy-brown, slightly greyer over the head, with a striking red bill and red rump, but lacking any red / orange on the face. Pale eyes were also noted. All these features are indicative of Anambra Waxbill (Borrow & Demey 2001, Fry & Keith 2004). On 22 August, in the same place, at least three, perhaps four, individuals were seen and photographed (Fig. 3), thereby confirming the identification. Unusually severe floods due to heavy rain prevented further visits until 23 October, when WP & BP observed two birds at the same spot. The entire area, still under c.1 m of water, was only accessible with a pirogue, which prevented an intensive search. Unaware of the observations made by WP & BP, JG found c.20 birds north of Ganvié along the Sô River in November. On 12 December, WP observed several individuals on the east bank of the Ouémé River, in Dangbo, north-west of Porto-Novo. On 10 January 2011, BP found three birds, probably immatures, at Sô-Ava, a fourth locality, <10 km from Cotonou. Subsequently, six adults, two of which were extremely confiding, were observed on 26 February (Figs. 4-5), two on 19 June and one on 28 August 2011. On 9 October 2011, a group of six adults was seen north-east of the Zinvié area (Table 1).

Description

From these observations and our photographs, the following description of adults can be given: small, dull-brown estrildid; thick, bright red bill and orange-red rump; brown, slightly scaly back; slightly darker brown tail and wing feathers; overall buffish underparts somewhat orangewashed on lower flanks; head slightly greyer

 Table 1. Observations of Anambra Waxbill Estrilda poliopareia in south-east Benin.

 Tableau 1. Observations de l'Astrild du Niger Estrilda poliopareia au sud-est du Bénin.

Date	No. of birds / Nombre d'oiseaux	Observer / Observateur	Locality / Localités	Coordinates / Coordonnées
08/08/2010	2	WP	Sèdjè-Dénou	06°43'30"N 02°23'15"E
22/08/2010	3 (or 4)	WP	Sèdjè-Dénou	06°43'30"N 02°23'15"E
23/10/2010	2	WP & BP	Sèdjè-Dénou	06°43'30"N 02°23'15"E
22-23/11/2010	c.20	JG	Ganvié	c.06°29'N 02°24'30''E
12/12/2010	3	WP	Dangbo	c.06°35'25"N 02°30'13"E
10/01/2011	3 (immatures)	BP	Sô-Ava	06°31'13''N 02°24'01''E
26/02/2011	4 + 2	BP	Sô-Ava	06°29'34''N 02°23'32''E and 06°31'13''N 02°24'01''E
19/06/2011	2	BP	Sô-Ava	06°29'34''N 02°23'32''E
28/08/2011	1	WP	Sô-Ava	06°29'34''N 02°23'32''E
09/10/2011	6	WP & BP	Zinvié	c.06°39'N 02°24'E

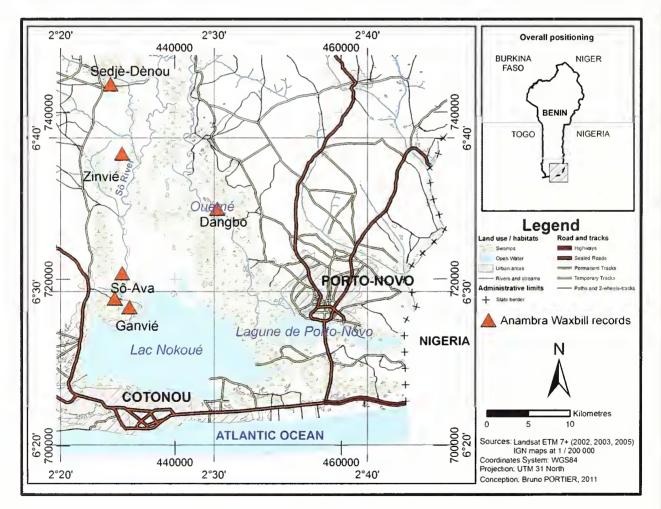


Figure 1. Map showing our records of Anambra Waxbill *Estrilda poliopareia* in south-east Benin. Carte montrant nos observations de l'Astrild du Niger *Estrilda poliopareia* dans le sud-est du Bénin.

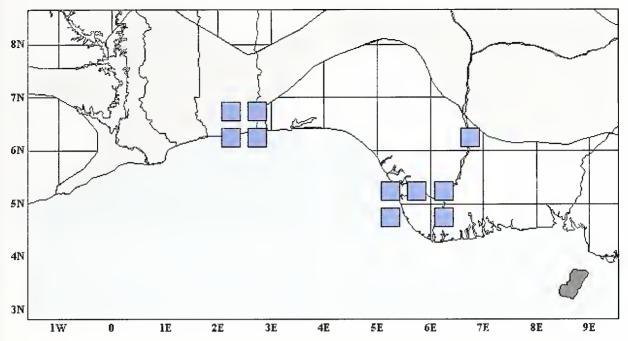


Figure 2. Map showing the overall known range of Anambra Waxbill *Estrilda poliopareia* (squares of 30 minutes × 30 minutes). The shading represents the transition zone, between the forest (Guineo-Congolian) and savanna (Sudanian) zones.

Carte montrant la répartition actuellement connue de l'Astrild du Niger *Estrilda poliopareia* (carrés de 30 × 30 min). La surface grisée représente la zone de transition entre la zone de forêt (Guinéo-Congolaise) et la zone de savane (Soudanienne).

(but not always obvious); no orange on lores or face; and pale brownish-grey irides (but not as white as in Guus Hak's photographs *in* Roux & Otobotekere 2005).

Three slightly duller coloured birds with dark (black?) bills seen briefly seen by BP on 10 October 2010 were thought to be immatures. The only vocalisations heard were some waxbill-type alarm-calls given on take-off (low, short and nasal *chips* notes, nervously repeated at 4–5 per second).

Confusion with related species (mostly other *Estrilda*) can readily be excluded based on plumage and overall colour, except perhaps with its two closest relatives, Fawn-breasted Waxbill *E. paludicola* and Abyssinian Waxbill *E. ochrogaster*, although their ranges do not overlap. Anambra and Abyssinian Waxbills have often been treated as races of Fawn-breasted Waxbill (Dowsett & Dowsett-Lemaire 1993). However, *E. poliopareia* differs from the nearest population of *E. paludicola*, *E. p. ruthae* (which occurs at Lékoni, Gabon, 01°35'S 14°16'E; R. J. Dowsett & F. Dowsett-Lemaire *in litt.* 2011) in lacking white / whitish underparts and the pale grey head contrasting with a white throat (Fry & Keith 2004). Immature



Figure 3. Anambra Waxbill / Astrild du Niger *Estrilda poliopareia*, Sèdjè-Dénou, Benin, 22 August 2010 (Wouter Plomp)

Zebra Waxbill *Amandava subflava*, which species has also recently been discovered in the area (Dowsett & Dowsett-Lemaire 2011), may appear very similar initially, but has a dark red eye, a dark bill and a dull brown (not orange) rump. Most female and immature firefinches *Lagonosticta* spp. can be excluded by virtue of their dark irides, bright red rump and less deep-based bill.



Figure 4. Anambra Waxbill *Estrilda poliopareia* feeding on *Eleusine indica* (Poaceae), Sô-Ava, Benin, 26 February 2011 (Bruno Portier)

Astrild du Niger *Estrilda poliopareia* se nourrissant de graines d'*Eleusine indica* (Poaceae), Sô-Ava, Bénin, 26 février 2011 (Bruno Portier)



Figure 5. Anambra Waxbill *Estrilda poliopareia* feeding on *Echinochloa colona* (Poaceae), Sô-Ava, Benin, 26 February 2011 (Bruno Portier)

Astrild du Niger *Estrilda poliopareia* se nourrissant de graines d'*Echinochloa colona* (Poaceae), Sô-Ava, Bénin, 26 février 2011 (Bruno Portier)

Location and habitat

All of our records of Anambra Waxbill are from the Lower Ouémé floodplain. The Ouémé River flows from northern Benin south to the Gulf of Guinea. The lower part of the river expands into a large delta with floodplains that flood seasonally. The western arm discharges into Lake Nokoué and the eastern part into Porto-Novo Lagoon. The delta extends north of Lake Nokoué for *c*.70 km, decreasing in width from 31 to *c*.7 km (Fig. 1).



Figure 6. Anambra Waxbill *Estrilda poliopareia* feeding on *Echinochloa colona* (Poaceae), Sô-Ava, Benin, 26 February 2011 (Bruno Portier) Astrild du Niger *Estrilda poliopareia* se nourrissant de graines d'*Echinochloa colona* (Poaceae), Sô-Ava, Bénin, 26 février 2011 (Bruno Portier)

The Lower Ouémé-Lake Nokoué-Porto-Novo Lagoon complex, which covers an area of 91,600 ha, is an Important Bird Area (IBA BJ004) (Cheke 2001) and a Ramsar Site (no. 1018; Ramsar 2011). It comprises a varied ecosystem with scattered small trees (Mimosa pigra, Sesbania sp., Hallea stipulosa, Raphia vinifera) in the seasonally flooded grassland, flooded prairies of Paspalum vaginatum and Typha australis, and floating vegetation dominated by exotic water hyacinth (*Eichhornia crassipes*) and water lettuce (Pistia stratiotes). The area covered by Rhizophora mangroves and periodically inundated forests of Berlinia grandiflora and Dialium guineense has declined dramatically, mainly due to clearance by the local human population, and is currently restricted to small remnant patches or young plantations.

Other than the Dangbo sighting, which comes from the east bank of the Ouémé, all of our records were made in the Plaine du Sô, along the Sô River, the westernmost tributary of the Ouémé. The Plaine du Sô is mainly a marshy area dominated by flooded *Paspalum* grasslands with a mixture of fields (mainly tomatoes), young fallow areas, small tree clumps, some open water and large sand extraction holes. Lying in the immediate vicinity of Cotonou, the economic capital of Benin, the area is heavily disturbed by human activities such as construction, agricultural production, fishing and fish farming. There are

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Figures 7–8. Track where two birds fed on the ground, Sô-Ava, Benin, 26 February 2011 (Bruno Portier) Piste sur laquelle deux oiseaux se nourrissaient au sol, Sô-Ava, Bénin, 26 février 2011 (Bruno Portier)

numerous tracks through the swamps and many villages and encampments; the human population density is 150–285 inhabitants per km².

In line with the findings of Roux & Otobotekere (2005), we never encountered Anambra Waxbill more than 1 km from riverbanks. The birds mainly fed on small seed-bearing herbaceous plants in the dry season (Figs. 4-6) and on the seed heads of tall partially inundated grasses in the rains. They occurred in pairs, small monospecific groups or larger mixed flocks (of up to 30-40 birds) with Orange-cheeked Waxbills, Red-billed Firefinches Lagonosticta senegala, Red-headed Queleas Quelea erythrops or Pin-tailed Whydahs Vidua macroura. As also noted by Roux & Otobotekere, they were much easier to approach when not in mixed flocks. On 26 February, two very confiding birds were seen feeding on the ground in the middle of a track, and could be approached to 2 m (Figs. 5-6). They did not even flush, but remained hidden in the herbaceous plants, when a motorbike drove past just c.1 m away (Figs. 7-8).

Discussion

Based on present knowledge and following careful comparison of the few available photographs and descriptions, those birds further east (i.e. in the Niger Delta) appear to possess brighter white irides and a brighter plumage and bill than those in Benin. One possibility is that there is some seasonal change in the intensity of colours related to breeding condition. Or, it might imply some genetic differences between the two populations, suggesting a possible (sub)specific splitting into western and eastern Anambra Waxbills. This requires further investigation.

Anambra Waxbill is obviously tolerant of human disturbance and adapts readily to humanmodified habitats (Roux & Otobotekere 2005: pers. obs.). In Benin, apparently suitable habitat occurs over c.54,000 ha in the Lower Ouémé basin. On the basis of the nearby Badagri record in western Nigeria and satellite images of the area, we estimate that suitable habitat might extend continuously east into Nigeria (thus including the Badagri record located c.45 km east of our easternmost record). However, due to the vicinity of large, densely populated urban areas (Cotonou and Porto-Novo), and the absence of national legal protection measures (despite its status as a Ramsar Site), the riverside habitat favoured by the species could be at risk.

The present note should spur additional surveys of the entire Lower Ouémé basin and neighbouring Nigeria. Field work is needed to collect further data on the species' habitat and distribution in order to assess its population size and the need for adequate conservation measures.

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